

University School of Milwaukee

3 Year Technology Plan 2001-2002 through 2003-2004

March 4, 2008

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Introduction

University School of Milwaukee students and families expect to have access to current technology and expect students to have a meaningful exposure to this technology at school. Our faculty learn and implement new ideas both to teach technology and to teach with technology. The School has committed significant funds to build the infrastructure to support the world of networked computing consistent with promoting the educational goals of USM. What follows is a plan for the next three years that will assist USM in maintaining the momentum in further developing and refining its own technology program. USM has an immense amount of talent, expertise, and interest that it can call upon. To achieve these goals in a most dynamic environment, it is essential to inspire commitment and cooperation, encourage the continual learning of faculty, students, parents, and administrators, and gain favorable consideration from our financial contributors. It is our hope that all of the USM community: faculty, administration, students, parents, and supporters will assist us in this crucial effort.

Background

The history of technology at USM mirrors the experience of many institutions. Starting in the early 1980s, the early microcomputers were seen by certain faculty as holding promise as educational instruments. Enterprising faculty and staff developed the first academic applications for use in and by classes. In the mid-80s, the arrival of the Apple Macintosh as the basic computer for academic applications was accepted, and the first 'Mac labs' were established, where a classroom of students could work simultaneously. This status held for several years with a couple of generations of Macs in the academic area, while in the administrative arena, the arrival of PC based systems and early networking allowed the installation of local systems and the establishment of a parallel, IBM-compatible environment. It was during this time that USM established a number of fine academic projects that brought computing skills deeply into the academic program and resulted in a progression of exposure to computing as an integral part of the curriculum.

The arrival of the Internet, particularly the worldwide web, in the mid 90s provided the impetus for major change. Given the commitment of USM to using technology as part of subject and grade level learning, the recognition that the current local networks would not provide the robust environment that the new technology required led to plans to provide an integrated network that would serve both academic and administrative functions. Developments in the computer market place moved the School to migrate its academic environment to the PC-compatible world. The rapid changes and the need to more effectively plan its technology future resulted in the addition of technical support staff and a cooperative relationship between the academic and administrative components which now had far more in common than in prior years.

In the late '90s USM substantially upgraded its approach to technology. A number of cost-effective projects provided a high-performance, platform-independent network backbone

that reached virtually all academic and administrative areas and provided access to Internet resources via a dedicated T1 line.

USM now finds itself facing issues of a new generation of educational technology. The concept of the traditional 'scheduled lab' needs review as teachers embrace computers for their teaching value, and new electronic resources become integral components of study. These resources include CDs packaged with textbooks, web sites that are designed as integral components of classroom study, and other powerful resources that require frequent and spontaneous access to technology. Furthermore, new options for communication between student and teacher, school and family, and student and external resources require a rethinking of the traditional specialized facilities.

Elements in the Environment That Affect the Plan

There are several factors that must be taken into account in creating the technology plans.

Classroom Size, which in many cases is small, limits the amount of technology that can be used in the classroom.

The Size of the Technology Support Staff is adequate to suit present activities but would be too small to operate/support additional systems.

Security Concerns About Our Students' Identity place restrictions on the use of our web page.

Teachers' schedules prevent group training sessions from being scheduled during the school day and frequently before and after school.

Financing must be a prime consideration when making technology-related decisions because of the size and recurring nature of technology expenses.

Technology Philosophy Statement

The philosophy of USM is to integrate technology into the academic experience of students and faculty. Students will have age and grade appropriate opportunities to use a computer efficiently for learning and information processing. The teacher is central to the use of technology in the instructional process. Teachers should have access to technology, training in the use of technology and the time to explore technology.

Technology is ever-changing and USM needs to be prepared to change with it.

Goals

Rooted in the USM Philosophy Statement and Guiding Principles (see Attachment 1), USM has established the following technology goals:

Goal 1 [Curriculum and Instruction] USM students will be exposed to and will effectively use a wide variety of technological equipment software, and skills as an integral part of their studies. This begins at the earliest level of USM education and is expanded throughout the students' experience at USM.

Goal 2 [Faculty Training and Use] USM faculty will be trained and confident users of technology and will integrate technology into the academic program of the school.

Goal 3 [Administrative Staff and Systems] The administrative staff will be trained and confident users of technology and the systems they use will provide the required performance, functionality, and integration to assist in the cost effective management of the institution.

Goal 4 [Infrastructure] The infrastructure of USM supports and promotes the necessary delivery of technology to the academic and administrative environments.

Goal 5 [External Access] USM technology extends beyond the physical boundaries of the school, allowing families, alumni, and others access to the academic and social environment of USM.

Goal 6 [Monitoring of Environment] The technology environment at USM including application to curriculum will be continually monitored so that it reflects a responsible blend of useable technology and academic/administrative applications.

University School of Milwaukee Technology Plan

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Goal 1 [Curriculum & Instruction] USM students will be exposed to and will effectively use a wide variety of technological equipment, software and skills as an integral part of their studies. This begins at the earliest level of USM education and is expanded throughout the student's experience at USM.

Sub goal	How this is cu
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1.1 Students will use technology to meet content-area goals across the curriculum – technology will not drive the curriculum.	<p>A Technology reviewed and and the techn</p> <p>A Technology C the technology co Division Techno “spiraling” of the Technology Skill in the Middle and Students are asse the end of 4th and Correct use of te Handbook. Students in Grad Use Policy. In the Upper Sch introductory, inte In the Middle Sc required. Middle programming, ro</p> <p>Upper School Co Computer Scienc</p>
1.2 Students will add to their technology skills – in both depth and breadth as they advance in grade level.	
1.3 Students in Middle and Upper School will have opportunities to take formalized Computer Science classes.	
1.4 Students in all Divisions will have an opportunity to use a programming language.	
1.5 Students will learn the ethical practices of using technology.	
1.6 Students’ use of technology will meet or exceed standards established by the International Society for Technology in Education (ISTE). (See Attachment 2.)	
1.7 Students will be given challenging opportunities to use hardware and software in innovative ways.	
1.8 Students will observe good role modeling by teachers who demonstrate intelligent and confident use of technology.	

1.9 Students in the Middle and Upper Schools will routinely use the same “toolkit” of software.	
1.10 Students who need remedial help in attaining technology-related skills will have an opportunity to receive it.	A technology in place for st training.
1.11 Students entering USM in Middle or Upper School will receive technology skills training if needed.	All students in Skills class. A beginning of t
1.12 Students will have access to technology in their classrooms as well in specialized settings such as computer labs and libraries.	In the Lower least one com
1.13 Students will have independent access to technology in order to complete their assignments.	Third grade class practice keyboard First through third labs at least once in the lab at least The Middle School that can run most open before and and when space p students who need Libraries in the M computers availa after school.
1.14 Students will have extracurricular opportunities to explore their interests in technology more deeply.	Upper School ha and digital film r

Goal 2 [Faculty Training and Use] USM faculty and staff will be trained and confident users of technology and teachers will integrate technology into the academic program of the School.

Sub goal	How this is currently being implemented
2.1 Teachers will have convenient access to the computer hardware and software they need to meet their educational goals.	<p>Teachers budget for technology items.</p> <p>Laptop computers are provided to all faculty.</p>
2.2 Teachers will integrate technology into their curriculum.	<p>In the Lower School, classroom teachers and the technology coordinator.</p> <p>TAC, Technology Across the Curriculum, is a Middle School committee which meets periodically throughout the year to work on integrating technology into the curriculum.</p> <p>In the Middle and Upper Schools teachers integrate technology into their lessons or in collaboration with colleagues and/or the technology coordinator.</p>
2.3 Teachers will model appropriate, confident, and intelligent use of technology.	<p>Teachers routinely use their classroom computers.</p> <p>All but the Preprimary faculty conduct lessons in the computer lab or with a classroom set of computers.</p>
2.4 Teachers will have a voice in how technology is used at USM.	<p>Teachers help prepare the technology school plan.</p> <p>In the Middle School the Technology Across the Curriculum committee solicits feedback and suggestions for technology use.</p>

	<p>Teachers are asked for input in the Technology Plan.</p> <p>Faculty representatives serve on the Technology Steering Committee.</p> <p>Each Division's Technology Coordinator teaches a Technology course.</p> <p>Teachers make decisions about classroom and lab technology.</p>
<p>2.5 Teachers will continually update the technology skills they use.</p>	<p>Teachers refer to a Division Technology Skills List to monitor progress.</p> <p>The Skills List is regularly revised.</p> <p>Technology use is part of the teacher evaluation process.</p>
<p>2.6 Teachers will have a variety of ways to improve and update their technology skills.</p>	<p>Teachers are able to gain expertise through various means: in-school, one on one and small group consultation with the Technology Coordinator, peer mentoring, instructional technology courses, a technology library maintained by the Technology Department and courses.</p>
<p>2.7 Teachers will use technology for their own professional use, i.e. class preparation, student assessment, communication, and administrative tasks.</p>	<p>Comment writing is done on a computer. Schools teachers do this using a web-based system.</p> <p>Faculty in the Middle and Upper Schools use electronic communication.</p> <p>All teachers have an email accounts.</p>
<p>2.8 Technology Coordinators and the members of the Technology Department will continually update their knowledge and skills to provide relevant and helpful support.</p>	<p>Coordinators are encouraged to routinely maintain contacts with others in the field.</p> <p>Technology Department members keep current with technology by attending seminars, reading industry news and working with vendors.</p>

Goal 3 [Administrative Staff and Systems] The administrative staff will be trained and confident users of technology and the systems they use will provide the required performance, functionality, and integration to assist in the cost-effective management of the institution.

Sub goal	How this is currently being implemented
3.1 Administrative software will be installed, implemented and maintained as needed.	<p>USM has installed the BlackBaud School Admin integrated administrative systems. This software is the latest release.</p> <p>The Technology Department constantly evaluates new releases.</p>
3.2 Upgrading for administrative staff will be in accordance with need and budget.	Administrative, classroom, and lab computers are replaced between 3-6 years depending on the specific requirements of the division, specific function, or additional demands.
3.3 Continual training will be available to new and current staff, including workshops, peer support, and a help desk.	Training is available online, through one-on-one sessions.
3.4 The Business Office will be able to communicate electronically with employees.	<p>E-mail is a primary means for communication between employees.</p> <p>An intranet is in the planning stages.</p>

Goal 4 [Infrastructure] The infrastructure of USM supports and promotes the necessary delivery of technology to the academic and administrative environments.

Sub goal	How this is currently being implemented
4.1 USM will use mainstream, industry-standard technology in support of the academic and administrative program	<p>A high-speed internal network using industry-standard provides network service to academic and administrative. T1 line for Internet access, which is distributed via the servers and network operating systems are used to provide academic applications.</p> <p>USM is standardized on the Microsoft Windows Server or XP) as its operating environment for servers. Other considered for specific applications.</p> <p>All servers have sufficient backup and monitoring capabilities monitored in order to keep servers and peripherals at the levels. Trained support staff is available to provide assistance, maintenance, and repair of hardware. Selected staff are key hardware such as computers, printers, and key network.</p>
4.2 All academic and administrative locations will be equipped for technology as needed including computer network and Internet access, cable television, and telephone.	<p>Cat 5 level wiring is available in all necessary areas, including laboratories, and other areas. Where needed, additional wiring to further expand network access. Future remodeling project will include wiring and electrical service so as to provide additional network access. Cable television jacks are available in all classrooms. Computer equipment, including televisions, LCD projectors, VCRs, and presentation equipment is available, both permanently and on a temporary basis, as appropriate.</p> <p>The campus has an integrated voice mail system.</p>

4.3 USM will standardize its technical environment as much as possible in order to achieve quantity of scale and to consolidate its support requirements.

USM standardizes on current Microsoft platforms for both serv Office is the standard office suite. We have chosen Blackbaud as databases for Business Office fund accounting (which includes C Accounts Payable), Admissions, and Registrar's Office (student transcripts). All US and MS faculty use Jackson Corp's GradeQ GradeQuick interfaces with Blackbaud's Registrar's Office.

<p>4.4 Computer facilities, such as wiring, rooms, communication facilities, and software, as well as support staff and expertise will be shared when possible between academic and administrative units.</p>	<p>All systems are physically secure and all connections are v</p>
<p>4.5 An affordable upgrade schedule will allow the School to maintain a sustainable level of current technology.</p>	<p>Administrative, classroom, and lab computers are replaced years depending on the specific requirement of the department or additional demands placed on the hardware.</p>

Goal 5 [External Access] USM technology extends beyond the physical boundaries of the School, allowing families, alumni, and others access to the academic and social environment of USM.

Sub goal	How this is
<p>5.1 USM will maintain an active and up-to-date World Wide Web site for multiple purposes, including School promotion and information for the School community.</p>	<p>Middle Sch course web School Divi</p> <p>Each Division USM has acce programmer fo School research library web pa General inform offsite server, an emergency communicatin</p>
<p>5.2 Dial-in facilities will be available to provide remote access for the USM community to the USM.</p>	<p>The school members to network fro</p>
<p>5.3 Students and families will use the School network for communication with teachers, classmates, and staff.</p>	<p>Teachers m</p> <p>Fourth through</p>

<p>5.4 USM will have a secure part of the website where we may communicate confidential information and information that warrants extra security.</p>	<p>Being explored</p> <p>(On hold until...)</p>
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Goal 6 [Monitoring of Environment] The technological environment, at USM, including application to curriculum, will be continually monitored so that it reflects a responsible blend of useable technology and academic/administrative applications.

Sub goal	How this is achieved
<p>6.1 Technology Standards will be regularly reviewed and reevaluated.</p>	<p>The focus of this goal is on the building of a productive technological environment in general. Given the current state of technology implementation, this is our focus.</p> <p>The Technology Standards and Skills standards are being reviewed as benchmarks.</p>
<p>6.2 The following technological developments will require continual attention, recognizing that rapid change may result in many more options and decisions:</p> <p>1. Increasing student access to computers with:</p>	<p>The division of IT team, and the Technology Committee are working on this and emerging technologies.</p>

<ul style="list-style-type: none"> • mobile classroom carts of laptops • personally-owned student laptops with network access • specialty computer labs/multimedia labs <p>2. Wireless networks in academic areas.</p> <p>3. Expanded Internal websites.</p> <p><i>4. Computer-based, self-paced training for faculty and students.</i></p> <p>.</p>	<p>informal co and monthl</p>
<p>6.3 USM will maintain communication with constituents regarding technology.</p>	<p>USM comm requirement make inform computing.</p>
<p>6.4 The price/performance aspects of USM technology will be continually monitored in the context of academic need, industry developments, and constituent needs. Planning and projections will be made with a reasonable amount of flexibility in order to account for unforeseen technological developments.</p>	<p>The Director this area. Th stays familia technology. with several educational</p>
<p>6.5 USM will continually evaluate the financial requirements of a suitable technological infrastructure and support in light of total campus financial requirements and needs.</p>	<p>By continua communicat institutions, and ISACS, of technolog</p>

Technology Steering Committee Action Plan

Note: This is a working document which associates our projects with the goals of the Technology Plan. The nature of annual attention, others require annual review. A few of the project require continuous monitoring.

Goal 1: Curriculum and Instruction

Item	2001-2002	2002-2003	2003-2004	Comments
Review and revise LS Technology Scope & Sequence.	Annual	Annual	Annual	Sue's target date is May
Review and revise MS Technology Scope & Sequence.	Annual	Annual	Annual	Sue will show Matt will work with Pam
Develop US Technology Scope & Sequence.	Develop	Annual	Annual	Technology is not a and Sequence. How the MS TC to assure technology skills an
Review and revise LS, MS, US Technology Curriculum.	Annual	Annual	Annual	2002-3 plans inclu software and a MS increase the Robola programming electi
Assess students at end of 4 th and 8 th grade; and when new to MS or US.	Develop	Implement	Review	All 5 th graders take All freshmen are ev
Monitor integration of technology w/ curriculum.	Annual	Annual	Annual	In Middle and Low curriculum is consi
Develop remedial plan for new students.	Develop	Implement	Review	Target date: _____ Responsible: _____
Implement keyboarding skills schedule.	Implement	Review	Review	Target date: _____ Responsible: _____

Analyze library needs in supporting the curriculum at all levels.	Annual	Annual	Annual	Target date: _____ Responsible: _____
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Goal 1: Curriculum and Instruction (continued)

Item	2001-2002	2002-2003	2003-2004	Comments
Investigate establishing a common private area to share on the Internet student work and classroom and grade level curriculum information with parents, students & faculty.	Investigate	Implement	Review	? Lower School is c for release is _____
Provide an electronic way(s) for students and teachers to publish digital work , i.e. CDs, video cassettes.	Implement	Review	Review	New US Lab comp divisions are purcha video equipment.
Provide technology-related information to parents of students who enroll after school has begun.	Develop	Implement	Review	? Target date: _____ Responsible: _____
Design a plan to meet the growing demands for student access to computers in labs, classrooms and study areas.	Develop	Implement	Review	Limited by space an time with LS lab an 2002-03 academic y

Goal 2: Faculty Training and Use	2001-2002	2002-2003	2003-2004	
Review need for support equipment, such as printers, scanners, and specialized software.	Annual	Annual	Annual	We have incorp the Middle Sc under consider will consider teach

Investigate projection systems to facilitate clear viewing during digital instruction and sharing in the classroom.	Investigate	Possibly Implement	Review	We are anti technology for the classroom. Consequently, y
Assess status of technical skills of all faculty.	Implement	Review	Review	LS / MS / US I Kristin is develop will be available will allow us to
Initiate process for including technology skills in Professional Growth Goals.	Implement	Review	Review	This has bee US will not be professional excl
Include measures for assessment of faculty skills in Faculty Evaluation process.	Implement	Review	Review	This is being do specificall
Develop criteria for determining technology expertise to use in hiring process.	Develop	Implement	Review	Interview chec prepared. (C Employment A
Develop remedial plan for new faculty.	Develop	Implement	Review	TCs meet with summer when p as convenient. and offered app up-to-spee
Provide ongoing schedule of specific workshops for faculty on as-needed basis.	Annual	Annual	Annual	This happens n that one-on-one effective tha

Provide external training options	Annual	Annual	Annual	We customarily Horizons for
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Goal 2: Faculty Training & Use (continued)

Item	2001-2002	2002-2003	2003-2004	C
Review and refine School policy regarding in-service days for technology education and software evaluation, substitutes for training times, contractual issues for Saturday and summer training, convenient access to training for those with coaching assignments.	Annual	Annual	Annual	
Investigate a means for Preprimary faculty to have time to prepare and print classroom documentation.	Investigate	Implement	Review	Assistants have been h
Provide personal digital assistants (PDAs) to administrators and faculty.	Investigate	Possibly Implement	Review	Under review. Under test Palm interface for Nikki is investig

Goal 3: Administrative Staff and Systems

Item	2001-2002	2002-2003	2003-2004	Comments
Provide training for administrative staff.	Annual	Annual	Annual	Trudi has interviewed providing follow-up su
Develop computer skills checklist for new hires.	Develop	Implement	Review	See <i>USM Technology</i> Trudi's Office
Create a way for the Business Office to provide online documents and other information to all school employees .	Investigate	Possibly Implement	Review	Alex is beginning design (Intranet)
Investigate further certification for technology support staff.	Annual	Annual	Annual	This is on hold due to t

Goal 4: Infrastructure

Item	2001-2002	2002-2003	2003-2004	Comments
Reevaluate method of Internet access periodically.	Annual	Annual	Annual	Ongoing. Monthly NetT distributed to I
Develop and revise upgrade/expansion plan for servers for both academic and administrative functions.	Annual	Annual	Annual	Assistant Director of T annual "Infrastructure ongo
Refine, test, and document backup and security procedures.	Annual	Annual	Annual	Target Responsible: S
Evaluate the use of a fully integrated voice and data system that will facilitate messaging of all types (voice mail, e-mail, faxes, etc.) into one system.	Investigate	Install test group (possibly)	Expand (possibly)	Funding for the first st been approved. First scheduled for 2002-03. phones will be added
Implement wireless local area networking (WLAN).	Implement	Review	Review	The remaining Middle basement levels will be 2003. Wireless will be School in the
Update hardware as appropriate.	Annual	Annual	Annual	Replacement Schedul
Investigate need for, type, and location of printers throughout the building.	Annual	Annual	Annual	Consider centralized p Target Responsible

Goal 5: External Access

Item	2001-2002	2002-2003	2003-2004	Comments
Continue maintenance of active USM web site.	continuous			Ken Williams of Synapse D have contracted with him to p monthly for the USM Web a
Investigate expansions to web site, such as online surveys, etc.	continuous			
Maintain direct dial-in to the USM network.	continuous			
Investigate the use and need for a VPN remote access to the school network for students and staff.	Investigate	Possibly Implement	Review	On hold due to budgetary res

Goal 6: Monitoring of Environment

Item	2001-2002	2002-2003	2003-2004	Comments
Determine mechanism for ongoing evaluation of our use of technology in the curriculum.	Develop	Review	Review	The 2002-03 theme for Tech <i>Technology Integration Look</i>
Develop and refine schedule for the reasonable upgrade of lab, office and classroom facilities.	Review	Review	Review	Replacement schedules have hardware. Remolding plans Level.
Visit other institutions.	Annual	Annual	Annual	
Investigate laptops for students and the subsequent role of dedicated computer laboratories.	Investigate	Possible implementation		We have decided against be School. However, we contin light of new technology. We are awaiting release of T significant role in USM tech
Expand intranet services.	Review	Review	Review	
Establish a policy for disposing of used laptops and desktops.	Review	Review	Review	A pool of “non-critical” com in non-critical applications. Plant Director, Bob Landry c and gets reimbursed for “ref
Identify a clear process for knowing whose budget will cover technology purchases and repairs.	Develop	Review	Review	In 2002-03 a Capital Budget comr Department will be represented on
Identify a clear process for requesting technology.	Refine	Review	Review	Request forms and project st

Attachments

Attachment 1

USM Philosophy Statement

Mission

University School of Milwaukee offers its students an educational environment in which

- high standards for academic performance, responsible behavior, integrity, and personal effort are valued;
- ? students are given opportunities to pursue excellence in academics, athletics, the arts, and extracurricular interests;
- ? diversity and the individual are respected; and
- ? students receive on-going support in their quest to become progressively independent and to meet the challenges of intellectual, physical, social, ethical, and aesthetic growth.

Guiding Principles

Educational decisions and goals at USM are based on several guiding principles:

- ? Students become competent readers, writers, listeners, speakers, thinkers, and problem solvers through their own personal efforts with the guidance of teachers and the support of parents.
- ? A skills-oriented, process-centered, and knowledge-based curriculum which actively engages students in learning can foster the development of higher level thinking.
- ? The use of a variety of instructional techniques, resources, and technological supports helps to meet the educational needs of students.
- ? Students need a developmentally appropriate curriculum.
- ? The school community must have high standards and expectations for learning and behavior which should be modeled by faculty, parents, and administrators.
- ? Faculty and parents should hold students progressively more accountable for their own learning and behavior.
- ? Teachers who are well-trained in their disciplines and who participate in on-going learning are the cornerstone of our community of learners.
- ? A physically and emotionally safe environment allows students and faculty to express their ideas and grow intellectually.

? The School encourages diversity in its student body and faculty and requires mutual respect among all its constituencies.

? The School fosters an ethical and supportive community by emphasizing respect, honoring, values, and practicing service to the school and the community.

- The School values the support and the involvement of parents.

The Goals of University School of Milwaukee

In its program, the School strives to develop;

? Students who have the knowledge and skills to be confident, progressively independent learners.

? Students who are committed to purposeful study and the pursuit of excellence

? Students who are physically and emotionally healthy.

In its community, the School seeks to nurture;

? Students who are active in the extracurricular life of the School

? Students who relate to others with respect, honesty, cooperation, and kindness.

? Students who value and practice service to others.

Approved by Faculty and Administration

Endorsed by Board of Trustees

September 1995

National Educational Technology Standards and Profiles for Students

(Developed through the National Educational Technology Standards (NETS) Project which was an International Society for Technology in Education (ISTE) initiative funded by the National Aeronautics and Space Administration (NASA) in consultation with the U.S. Department of Education; the Milken Exchange on Education Technology; and Apple Computer, Inc.)

Technology Foundation Standards for Students

1. Basic operations and concepts

- *Students demonstrate a sound understanding of the nature and operation of technology systems.*
- *Students are proficient in the use of technology.*

2. Social, ethical, and human issues

- *Students understand the ethical, cultural, and societal issues related to technology.*
- *Students practice responsible use of technology systems, information, and software.*
- *Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.*

3. Technology productivity tools

- *Students use technology tools to enhance learning, increase productivity and promote creativity.*
- *Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.*

4. Technology communications tools

- *Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.*
- *Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.*

5. Technology research tools

- *Students use technology to locate, evaluate, and collect information from a variety of sources.*
- *Students use technology tools to process data and report results.*
- *Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.*

6. Technology problem-solving and decision-making tools

- *Students use technology resources for solving problems and making informed decisions.*
- *Students employ technology in the development of strategies for solving problems in the real world.*

Profiles for Technology Literate Students

Prior to completion of Grade 2 students will:

1. Use input devices (e.g., mouse, keyboard, remote control) and output devices (e.g., monitor, printer) to successful
operate computers, VCRs, audiotapes, and other technologies. [Standard 1]
2. Use a variety of media and technology resources for directed and independent learning activities.
[Standards 1 & 3]
3. Communicate about technology using developmentally appropriate and accurate terminology.
[Standard 1]
4. Use developmentally appropriate multimedia resources 9 e.g., interactive books, educational software, elementary
multimedia encyclopedias) to support learning. [Standard 1]
5. Work cooperatively and collaboratively with peers, family members, and others when using technology
in the
classroom. [Standard 2]
6. Demonstrate positive social and ethical behaviors when using technology. [Standard 2]
7. Practice responsible use of technology systems and software. [Standard 2]
8. Create developmentally appropriate multimedia products with support from teachers, family members,
or student
partners. [Standard 3]
9. Use technology resources 9 e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for
problem solving, communication, and illustration of thoughts, ideas, and stories. [Standards 3, 4, 5, 6]
10. Gather information and communicate with other using telecommunications, with support from teachers, family
members, or student partners. [Standard 4]

Prior to completion of Grade 5 students will:

1. Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively. [Standard 1]
2. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
[Standards 1, 2]
3. Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use. [Standard 2]
4. Use general purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum. [Standard 3]
5. Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom. [Standards 3, 4]
6. Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests. [Standard 4]
7. Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom. [Standards 4, 5]
8. Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem-solving self-directed learning, and extended learning activities. [Standards 5, 6]
9. Determine when technology is useful and select the appropriate tools(s) and technology resources to address a variety of tasks and problems. [Standards 5, 6]
10. Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.
[Standard 6]

Prior to completion of Grade 8 students will:

1. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.

[Standard 1]

2. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the

workplace and society. [Standard 2]

3. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.

[Standard 2]

4. Use content-specific tools, software and simulations (e.g., environmental probes, graphing calculators, exploratory

environments, Web tools) to support learning and research. [Standards 3, 5]

5. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning

throughout the curriculum. [Standards 3, 6]

6. Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.

[Standards 4, 5, 6]

7. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-

related problems, issues, and information, and to develop solutions or products for audiences inside and outside

the classroom. [Standards 4, 5]

8. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.

[Standards 5, 6]

9. Demonstrate and understanding of concepts underlying hardware, software and connectivity, and of practical

applications to learning and problem solving. [Standards 1, 6]

10. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic

information sources concerning real-world problems. [Standards 2, 5, 6]

Prior to completion of Grade 12 students will:

1. Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of

these systems and services to address personal, lifelong learning, and workplace needs. [Standard

2]

2. Make informed choices among technology systems, resources, and services. [Standards 1, 2]
3. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole. [Standard 2]
4. Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information. [Standard 2]
5. Use technology tools and resources for managing and communicating personal/professional information e.g., finances, schedules, addresses, purchases, correspondence). [Standards 3, 4]
6. Evaluate technology-based options, including distance and distributed education, for lifelong learning. [Standard 5]
7. Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity. [Standards 4, 5, 6]
8. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning. [Standards 4, 5]
9. Investigate and apply expert systems, intelligent agents, and simulations in real-world situations. [Standards 3, 5, 6]
10. Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce and disseminate information, models and other creative works. [Standards 4, 5, 6]

USM Technology Organizational Structure

The Board Technology Committee

Purpose

- Approve recommendations submitted by TSC Executive Committee related to annual budget and long range plan
- Review overall direction for Technology at the school (Strategic Plan Goal 4)
- Provide liaison between TSC Executive Committee and the Board of Trustees.

The Executive Committee of the Technology Steering Committee

Purpose

- Review and resolve issues submitted by TSC
- Submit proposals to the Board
Examples: Long Range Technology Plan, Budget, etc.
- Evaluate Technology initiatives in relation to Strategic Plan.

Members of the Executive Committee of the Technology Steering Committee 2000-2001

Ward Ghory	Head of School
Gregg Bach	Head of Middle School
Carolyn Lengh	Head of Lower School
Rosie Lyons	Head of Upper School
Trudi Marino	Director of Technology

The Technology Steering Committee

Purpose

Review Tech Team draft proposals and provide input on issues such as:

- Long Range Technology Plan
- Annual Capital Technology Budget
- Scope and Sequence / technology Integration across divisions
- Competency and assessments for faculty and students

Members of the USM Technology Steering Committee 2001-2002

Simon Bailey	Assistant Head, Upper School
Kristin Bayer	Upper School Technology Coordinator & Teacher
Judy Bloch	Director, Learning Center
Kathy Choren	Assistant Head, Lower School
Alex Chou	Director of Business Services
Chris Cruz	Network Administrator
Randy Dean	Director of Development
Francine Eppelsheimer	Middle School Librarian, Library Dept. Chair
Paul Greeney	Upper School Physics Teacher & US Science Dept. Chair
Nikki Lucyk	Third Grade Teacher & LS Math Dept. Chair
Trudi Marino	Director of Technology
Pam Nosbusch	Middle School Academic Dean, French Teacher
Matt Montagne	Middle School Technology Coordinator & Teacher
Sue Sterling	Lower School Technology Coordinator & Teacher
Chuck Taft	Middle School History Teacher & MS History Dept. Chair

The Technology Team

Purpose

- Assure smooth technical operations and integration of technology in the total educational program
- Daily implementation/support
- Draft long range technology plan
- Research and Development
- Professional development for faculty and staff

Members of the Technology Team

Trudi Marino	Director of Technology
Kristin Bayer	US Technology Coordinator & Teacher
Kim Burgardt	Technology Office Manager
Chris Cruz	Network Administrator/Assistant Director of Technology
Francine Eppelsheimer	Library Dept. Chairman
Ross Hauk	System Administrator
Tom Mussoline	US Computer Lab Administrator
Matt Montagne	MS Technology Coordinator & Teacher

Sue Sterling	LS Technology Coordinator & Teacher
Steve Villeneuve	MS Computer Lab Administrator & General Technology Support LS & MS

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